# PROCEEDINGS

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# DESCRIPTIONS OF TWELVE NEW SPECIES OF MIRI-DAE FROM THE DISTRICT OF COLUMBIA AND VICINITY (HEMIPTERA).<sup>1</sup>

### BY HARRY H. KNIGHT.

It was the writer's good fortune to spend the summer of 1926 in Washington, D. C., working over and arranging the collection of Miridae in the United States National Museum. During week ends some opportunity was had for collecting Hemiptera in that vicinity. It may be of interest to note that the season of 1926 proved to be the poorest year I have ever experienced for collecting Hemiptera. This opinion was gained after driving across the country and collecting in Iowa, Illinois, New York, Pennsylvania, Maryland, District of Columbia, and Virginia. In spite of the adverse season a few good things were taken but only by hard work in sweeping and beating. Many species, however, appeared to be entirely absent from their normal host plants, this being particularly true of those breeding on trees and shrubs. Mr. W. L. McAtee and Mr. H. G. Barber also are of the same opinion that collecting was very poor during 1926.

In working up a list of Miridae for the District of Columbia and vicinity, a few unnamed species have come to notice with the result that the following descriptions are offered now.

#### Sthenarus mcateei, n. sp.

Distinguished by the small size and bright red color, with pale antennae and legs.

Q. Length 2.7 mm., width 1.5 mm. Head: width .59 mm., vertex .37 mm. Rostrum: length 1.33 mm., extending slightly behind posterior coxae, bright red, paler on the apical half. Antennae: segment I, length

<sup>&</sup>lt;sup>1</sup>Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.

.24 mm.; II, 1.06 mm., slender, slightly thicker apically, length slightly greater than width of pronotum at base; III, .71 mm.; IV, .47 mm.; uniformly pale. Pronotum: length .47 mm., width at base 1.02 mm.

Clothed with simple yellowish pubescence; uniformly bright red, in paler specimens light red, antennae and legs including tibial spines uni-

formly pale or yellowish; membrane pale to dusky, veins red.

Holotype: Q July 29, 1917, Odenton, Maryland (W. L. McAtee); collection of W. L. McAtee. Paratypes: 4 Q July 12, 1914, Odenton, Maryland (W. L. McAtee), collected on wild grapevine (Vitus sp.). Q June 12, 1926, Carthage, Mississippi (H. G. Johnston).

This species is referred to the genus Sthenarus which at present is a repository for small forms having pale, impunctate tibiae, and clothed with simple pubescence.

# Microphylellus minuendus, n. sp.

Runs in my key (Hem. Conn., 1923, p. 454) to maculipennis Kngt., but differs in the smaller size and uniformly light yellowish brown color.

Q. Length 2.6 mm., width 1.3 mm. Head: width .59 mm., vertex .32 mm. Rostrum imbedded although apparently reaching to near posterior margins of hind coxae. Antennae: segment I, length .18 mm.; II, .71 mm.; III, .44 mm.; IV, .31 mm.; uniformly yellowish, last segment scarcely dusky. Pronotum: length .53 mm., width at base 1.06 mm.

Pubescence simple and rather abundant as in *Plagiognathus*. Dorsum uniformly light yellowish brown; sides of thorax and venter, sternum, and lower half of face, fusco-brownish to fuscous. Membrane pale to dusky, somewhat darker across apical half of areoles. Legs pale yellowish, tibial spines brownish black, without distinct spots at base; hind femora with two rows of fuscous spots, the dorsal row larger and darker.

Holotype: Q June 21, 1914, Plum Point, Maryland (W. L. McAtee); collection of W. L. McAtee. Paratype: Q June 20, 1914, Plum Point, Maryland (W. L. McAtee); author's collection.

#### Plagiognathus carneolus, n. sp.

Distinguished by the impunctate tibiae and pale tibial spines; generalcoloration pale to yellowish, scutellum, corium, and cuneus yellowish brown with a tinge of flesh color; becoming dusky in the male.

♂. Length 4.2 mm., width 1.48 mm. Head: width .80 mm., vertex .32 mm. Rostrum: length 1.54 mm., surpassing the middle coxae but not attaining posterior margins of hind coxae. Antennae: segment I, length .24 mm., pale to dusky; II, 1.09 mm., cylindrical, equal in thickness to segment I, light brown to dusky; III, .68 mm., fuscous; IV, .38 mm., fuscous. Pronotum: length .59 mm., width at base 1.2 mm.

Pubescence yellowish brown to dusky. General coloration pale to yellowish brown; head, scutellum and sternum darker brown, tinged with fuscous, pronotum more or less dusky. Corium except along claval suture, and cuneus except base, light brown with a tinge of flesh color. Membrane rather uniformly fuscous, veins yellowish, a white callous mark

bordering distal margin of larger areole. Legs pale to yellowish, impunctate, tibiae sometimes dusky, spines pale to brownish without spots at base; tarsi fuscous.

Q. Length 3.7 mm., width 1.7 mm. Head: width .82 mm., vertex .40 mm. Rostrum: length 1.6 mm., scarcely attaining posterior margins of hind coxae. Antennae: segment I, length .21 mm.; II, 1 mm., more slender than segment I; III, .58 mm.; IV, .35 mm. Pronotum: length .59 mm., width at base 1.3 mm. Very similar to the male in pubescence and coloration, but the scutellum and corium more reddish brown.

Holotype: & May 5, 1918, Odenton, Maryland (W. L. McAtee); collection of W. L. McAtee. Allotype: topotypic; author's collection. Paratypes: 3 & 3 & 1, taken with the types. & May 13, 1901, Falls Church, Virginia (S. A. Rohwer). Mr. McAtee found this species breeding on Pinus virginiana, where it is one of the first to mature of the several species of Mirids breeding on that host.

#### Plagiognathus albifacies, n. sp.

Runs to *blatchleyi* Reut. in my key (Hem. Conn., 1923, p. 432), but distinguished by the pale antennal segment I, black sternum, longer head, and differently formed male genital claspers.

♂. Length 4.4 mm., width 1.5 mm. Head: width .81 mm., vertex .35 mm.; pale yellowish, tylus blackish. Rostrum: length 1.85 mm., just attaining posterior margins of hind coxae, chiefly pale. Antennae: segment I, length .39 mm., pale, annulus at base and spot on apical half black; II, 1.55 mm., black; III, 1.14 mm., blackish; IV, broken. Pronotum: length .74 mm., width at base 1.28 mm.; pale yellowish, tinged with greenish in fresh specimens, basal angles dusky to brownish. Scutellum yellowish, somewhat brownish on middle of base and on mesoscutum.

Clothed with pale to yellowish pubescence, sometimes a few hairs dusky on the darker areas. Hemelytra pale yellowish, inner half of clavus and apical half of corium dusky to pale fuscous, usually paler along radial vein, claval suture, and commissure. Cuneus pale to dusky, in dark specimens rather uniformly fusco-brownish, translucent. Membrane fuscous, veins and bordering apex of cuneus paler. Legs pale, femora with two rows of blackish spots on anterior face, hind femora with the antero-dorsal row composed of six larger black spots. Tibial spines black with prominent black spots at base of each, tibial knees black, tarsi fuscous to black. Genital claspers distinctive, the left clasper with lateral or basal lobe much larger than in blatchleyi.

Q. Length 4.7 mm., width 1.68 mm. Head: width .83 mm., vertex .39 mm. Antennae: segment I, length .41 mm.; II, 1.51 mm., blackish, more or less pale on basal half; III, 1.2 mm.; IV, .58 mm. Pronotum: length .78 mm., width at base 1.45 mm. Very similar to the male in coloration and pubescence.

Holotype: & July 14, 1922, Urbana, Illinois (P. A. Glick); author's collection. Allotype: same data as the type. Paratypes: DISTRICT OF COLUMBIA—& July 6, 1884, & Aug. 20, 1886, Washington (O. Heide-

mann). MARYLAND—Plummers Island: 9 July 24, 1905, & July 27, 1913, ♂ 2 ♀ Aug. 1, 1906, ♀ Aug. 11, ♂ Aug. 25, 1907 (W. L. McAtee); o Aug. 9, 1902 (Barber & Schwarz); 2 ♀ Aug. 23, 1903 (O. Heidemann); 9 Sept. 10, 1905 (D. H. Clemons); & Sept. 15, 1907 (A. K. Fisher).

# Plagiognathus crocinus, n. sp.

Runs to albatus Van D. in my key (Hem. Conn., 1923, p. 431), but differs in the light orange vellow color and with fuscous along innner margins of clavus only.

Q. Length 3.5 mm., width 1.36 mm. Head: width .68 mm., vertex .35 mm.; eves minutely pubescent. Rostrum: length 1.43 mm., slightly surpassing the hind coxae. Antennae: segment I, length .26 mm., yellow, a fuscous spot on apical half from which arise two dark hairs; II, 1 mm., vellow; III, .69 mm., yellow to dusky; IV, .38 mm., yellow to dusky.

Pronotum: length .56 mm., width at base 1.09 mm.

Clothed with simple pale vellowish pubescence. Coloration light vellow to orange vellow; clavus fuscous along commissure and bordering cuneus. Membrane pale, areoles pale fuscous, a dark ray on outer margin behind cuneus, its width nearly equal to width of cuneus, veins yellow. Legs yellow, tibial spines dark with small fuscous point at base of each; hind femora with a row of small fuscous points near antero-dorsal margin, also three or four other points near apex.

J. Length 3.8 mm., width 1.4 mm. Head: width .71 mm., vertex .32 mm. Antennae: segment I, length .26 mm.; II, 1.45 mm.; III, .69 mm.; IV, .35 mm. Pronotum: length .59 mm., width at base 1.17 mm. Pubescence and coloration similar to the female, although apical area of corium with faint fuscous cloud apparent.

Holotype: Q July 1, 1914, Bluemont, Virginia (W. L. McAtee); collection of W. L. McAtee. Allotype: o, taken with type; author's collection.

### Plagiognathus similis furvus, n. var.

Runs to annulatus var. cuneatus Kngt. in my key (Hem. Conn., 1923, p. 431), but distinguished by the smaller size and shorter second antennal segment which is not equal to width of pronotum at base.

♂. Length 3.8 mm., width 1.24 mm. Head: width .71 mm., vertex .28 mm. Antennae: segment I, length .24 mm.; II, .98 mm.; III, .66 mm.; IV, .37 mm.; black, last two segments yellowish to dusky. Pronotum: length .53 mm., width at base 1.05 mm.

Not differing in structure from similis Kngt., but runs in a different section of the key due to the black antennae. Black, vertex, base of cuneus and sides of mesoscutum pale or yellowish. Legs pale with blackish spots similar to the typical form.

Type: July 20, 1926, Plummers Island, Maryland (H. H. Knight); author's collection. Paratype: o, taken with the type on birch (Betula sp.), probably yellow birch. of June 20, 1916, Swannanoa, North Carolina (R. W. Leiby).

Plagiognathus similis Kngt. was originally described as a variety of albatus Van D. (Hem. Conn., 1923, p. 445), but with the collection of the present material the writer is of the opinion that we are dealing with a valid species. The type of *similis* was collected on alder (*Alnus*), Berrien County, Michigan (R. F. Hussey), while the writer has taken a pair of typical specimens on birch (*Betula*) along with the above described color variety.

# Psallus clavicornis, n. sp.

Allied to *piceicola* Kngt., and very similar in form and color although smaller; distinguished by the short and strongly thickened second antennal segment.

Q. Length 2 mm., width .92 mm. Head: width .50 mm., vertex .31 mm. Rostrum: length 1 mm., reaching upon base of ovipositor. Antennae: segment I, length .18 mm., strongly thickened, more slender toward base; II, .38 mm., fusiform, equal to thickness (.60 mm.) of segment I; III, .27 mm., slender, yellowish, fuscous on apical half; IV, .19 mm., slender, dusky; first two segments dark reddish brown. Pronotum: length .38 mm., width at base .81 mm. Coloration and pubescence nearly identical with piceicola Kngt. except legs dark reddish brown, the tibiae paler.

Holotype: Q June 27, 1926, Drury, Maryland, swept from Pinus virginiana found growing on the sandy area near the Patuxent River and handed to me in the net by Dr. H. E. Ewing; author's collection. Paratypes: P March 3, 1880, Washington, D. C. (Pergande), "found feeding upon mealy bug." The male is mutilated and unfit for description.

#### Diaphnidia heidemanni, n. sp.

Distinguished from others of the genus by the short, transverse pronotum, with distinct transverse impression behind calli; membrane pale with veins and areoles green.

Q. Length 4.4 mm., width 1.36 mm. Head: width .80 mm., vertex .38 mm.; vertex much flattened, eyes prominent. Rostrum, length .74 mm., only reaching to middle of sternum. Antennae: segment I, length .52 mm., thickness .13 mm., clothed with recumbent, stiff pubescence and bearing six or seven erect bristles which in length about equal thickness of segment; II, 1.43 mm., cylindrical, thickness .06 mm.; III, 1.57 mm., longer and more slender than II; IV, .60 mm.; pale, tinged with green, scarcely dusky apically. Pronotum: length .41 mm., width at base 1 mm., width apically .71 mm., lateral margins straight, basal margin gently arcuate anteriorly, disk flat, a distinct transverse impression delimiting posterior margins of calli; mesoscutum broadly exposed, scutellum moderately convex.

Clothed with simple, rather prominent pale pubescence; head, pronotum, and margins of hemelytra set with prominent, longer pubescent hairs. Hemelytra uniformly bluish green, areoles and veins of the same color, membrane otherwise pale. Legs pale to greenish, pale pubescent, tibial spinules brownish.

o<sup>3</sup>. Length 4.3 mm., width 1.36 mm. Head: width .86 mm., vertex .34 mm. Antennae: segment I, length .53 mm.; II, 1.45 mm.; III, 1.58 mm.; IV, .60 mm. Pronotum: length .41 mm., width at base .98 mm.

Very similar to the female in form, pubescence and coloration.

Holotype: Q June 20, 1887, Washington, D. C. (O. Heidemann); U. S. National Museum collection. Allotype: collected with the type; Cornell University collection. 3 Q taken with the types. Paratypes: DISTRICT OF COLUMBIA—Q July 4, Q Oct. 15, 1886, Q June 15, 1887, Q May 7, Q May 10, Q Q June 20, 1888, Q July 2, 1891, 4 Q July 6, Q June 23, 1890, June 18, Q June 19, Q Q July 2, 1891, Q Q July 6, Q July 8, Q Q July 10, Q Q July 12, 1893, Q June 25, 1904, Washington (O. Heidemann). MARYLAND—Q Q July 4, 1887, Henson Creek, Prince Georges Co. (O. Heidemann). Heidemann gave the host plant as Fraxinus excelsior.

#### Xenoborus chionanthi, n. sp.

Runs to neglectus Kngt. in my key (Hem. Conn., 1923, p. 567), but easily distinguished by the pale antennae, and smaller and more ovate form; coloration and form more suggestive of Neoborus vittiscutis Kngt., but easily separated by the generic characters.

Q. Length 4.5 mm., width 2 mm. Head: width 1.06 mm., vertex .47 mm.; yellowish, tylus and median line of vertex blackish. Rostrum: length 1.23 mm., reaching upon middle of intermediate coxae. Antennae: segment I, length .56 mm.; II, 1.4 mm.; III, .80 mm.; IV, .54 mm.; pale yellowish, scarcely dusky on apex. Pronotum: length .94 mm., width at base 1.68 mm.; lateral margins ecarinate, calli prominent, blackish on disk of each; yellowish, propleura and a ray-like cloud behind each callus fuscous. Scutellum pale yellowish, mesoscutum dark brown or fuscous. Sternum brownish, sides of thorax blackish.

Pubescence prominent, pale yellowish. Coloration pale yellowish, hemelytra subtranslucent; clavus bordering scutellum and commissure, embolium except apex, corium exterior to radial vein although curving inward across apex, dark brownish black. Cuneus uniformly pale translucent. Membrane uniformly dark fuscous, pale bordering cuneus and anal area. Legs uniformly pale yellowish, tips of tarsi and claws brownish. Venter brownish yellow, sides somewhat darker.

o<sup>n</sup>. Length 4 mm., width 1.7 mm. Head: width 1 mm., vertex .38 mm. Antennae: segment I, length .53 mm.; II, 1.33 mm.; III, .62 mm.; IV, .44 mm. Pronotum: length .83 mm., width at base 1.45 mm. Pubescence and coloration similar to female.

Holotype: Q July 20, 1926, Plummers Island, Maryland (H. H. Knight); author's collection. Allotype: same data as the type. Paratypes: 6 Q, collected with the types on fringe tree (Chionanthus virginica); two nymphs were also taken and feeding spots noted on the leaves. MARYLAND—Plummers Island: Q July 4, 1908 (O. Heidemann). Q July 8, 1906, Q Aug. 8, 1907, 2 Q July 20, 1926 (W. L. McAtee). Q June 6, 1905 (D. H. Clemons). Q 5 Q July, 1907 (Wm. Palmer). Q July 8 (E. A. Schwarz). Q Aug. 25, 1904 (R. P. Currie). VIRGINIA—Q June 13,

1908, Great Falls (O. Heidemann).  $\,\,$  \$\text{Aug. 30, 1916, Dunn-Loring (W. L. McAtee)}.

# Xenoborus chionanthi nigrellus, n. var.

Similar in structure to the typical form but differing in the black color. Hemelytra and pronotum except median line of disk, black; mesoscutum, base of scutellum and vitta on median line extending to middle, black; head brown with median line and tylus black; legs and antennae uniformly pale.

Type: ♂ July 20, 1926, Plummers Island, Maryland (H. H. Knight); author's collection.

# Dichrooscytus tinctipennis, n. sp.

†Dichrooscytus elegans Knight, Hemiptera Conn., 1923, p. 597.

Allied to *viridicans* Kngt., but distinguished by the broader vertex and reddish hemelytra.

3. Length 3.7 mm., width 1.5 mm. Head: width .83 mm., vertex .355 mm. Rostrum: length 1.18 mm., scarcely attaining posterior margins of hind coxae, yellowish brown, darker on apex. Antennae: segment I, length .326 mm., not equal to width of vertex; II, 1.36 mm.; III, .50 mm.; IV, .42 mm. Pronotum: length .64 mm., width at base 1.18 mm.

Clothed with soft brownish, simple pubescence, pale or yellowish on embolium and legs. General coloration yellowish green, more distinctly green on pronotum and tibiae; corium, clavus, and inner apical half of cuneus, reddish; base and outer margin of cuneus paler. Membrane uniformly light fuscous, veins reddish, an opaque white callous mark bordering apical angle of larger areole.

Q. Length 3.6 mm., width 1.6 mm. Head: width .89 mm., vertex .43 mm. Antennae: segment I, length .326 mm.; II, 1.27 mm.; III, .59 mm.; IV, .43 mm. Pronotum: length .66 mm., width at base 1.3 mm. Slightly more robust than the male but very similar in pubescence and coloration.

Holotype: & June 19, 1915, Batavia, New York (H. H. Knight); author's collection. Allotype: same data as the type. Paratypes: 100 & \$\forall \text{ taken}\$ with the types on white cedar (Thuja occidentalis L.). 29 & \$\forall \text{ June 27, 1915, Portageville, New York (H. H. Knight), breeding on Juniperus virginiana. DISTRICT OF COLUMBIA—8 & \$\forall \text{ June 15, 1891, }\text{ June 18, 1897, Washington (O. Heidemann). GEORGIA—}\text{ June 8, 1917, Stone Mountain (H. H. Knight). KANSAS—}\text{ Riley County (Marlatt). MARYLAND—}\text{ May 24, 1914, Plummers Island (W. L. McAtee). MINNESOTA—}\text{ July 20, 1920, Gray Cloud Island (H. H. Knight). NEW JERSEY—}\text{ May, }\text{ May 29, Lakehurst (Wm. T. Davis). VIRGINIA—}\text{ June 2, 1917, Soudan (H. H. Knight). }\text{ \$\forall \text{ Pairfax County (O. Heidemann).}}

Both tinctipennis and viridicans Kngt. breed on red cedar, the latter species being distinguished by the green color and narrow vertex; width of vertex not greater than length of the first antennal segment. This

eastern species has usually been identified as elegans Uhler, a species described from New Mexico. During the past summer (1926) I have examined the types in the U. S. National Museum and find elegans Uhler to be entirely different, in fact more closely allied to vittatus Van D.

### Phytocoris junipericola, n. sp.

Allied to angustulus Reut., but smaller and more uniformly yellowish; distinguished by the shorter first antennal segment which is not equal to width of head.

♂. Length 4.1 mm., width 1.5 mm. Head: width .81 mm., vertex .24 mm. Rostrum: length 1.54 mm., reaching upon eighth ventral segment. Antennae: segment I, length .72 mm., greenish yellow, set with several brownish setae which in length exceed thickness of segment; II, 1.74 mm., yellowish brown, apical half becoming infuscated; III, .89 mm., blackish; IV, .42 mm., blackish. Pronotum: length .65 mm., width at base 1.45 mm.

Clothed with golden brown to dusky, simple pubescence. General coloration brownish yellow and tinged with greenish; head, pronotum, and scutellum without infuscations; corium with an oblique fuscous mark just before middle and a second one across inner apical angle, both directed obliquely mesad; apex of cuneus, and two spots along membrane margin, one at base and one near middle, black. Membrane and veins uniformly dark fuscous with vein at apex of larger areole pale. Legs yellowish, dorsal aspect of femora shaded with light fuscous, leaving a few small yellow dots on apical half; hind tibiae pale, impunctate, set with brown spines. Genital segment fuscous on base; claspers distinctive although exhibiting a close relationship with angustulus Reut.

Q. Length 4.3 mm., width 1.6 mm. Head: width .83 mm., vertex .34 mm. Antennae: segment I, length .77 mm.; II, 1.8 mm.; III, .92 mm.; IV, .74 mm. Pronotum: length .74 mm., width at base 1.33 mm. Similar to the male in pubescence and coloration.

Holotype: & July 25, 1926, Washington, D. C. (H. H. Knight); author's collection. Allotype: same data as type. Paratypes: 3 & 11 & 12, taken with the types on Juniperus virginiana; collected on the large red cedars which grow in the triangle of land between Massachusetts and Cathedral Avenues west of Wisconsin Avenue. 2 & July 19, topotypic; & Aug. 6, collected at light, Washington, D. C.; & July 17, 1926, Glen Echo, Maryland (H. H. Knight). 2 & Aug. 3, 1915, Plummers Island, Maryland (R. C. Shannon and V. A. Roberts).

Junipericola runs to group III in my key to Phytocoris (Hem. Conn., 1923, p. 615), placing it with a group of conifer inhabiting species. On the basis of genitalia this species is most closely allied to angustulus Reut., which form is placed in group II of my key due to the longer antennae. P. angustulus Reut. occurs on hemlock (Tsuga canadensis), and thus it is interesting to note that its nearest relative breeds on Juniper. Both species appear to be plant feeding forms as they occur among the terminal twigs and have the same pigments in the hypodermis as the sap feeding Parthenicus juniperi (Heid.).

# Phytocoris purvus, n. sp.

Allied to *minutulus* Reut., but differs in the shorter antennal segment I, the uniformly black segment II with narrow pale annulus only at base, in the larger eyes and narrow vertex, subapical black marks on scutellum, and in structure of the genital claspers.

♂. Length 5.5 mm., width 1.9 mm. Head: width 1.05 mm., vertex .22 mm.; eyes large and prominent, vertex chiefly pale, front with six transverse dark lines, lower from and tylus black, a V-shaped white mark on basal half of tylus, juga white with transverse blackish mark on dorsal half, lora black with pale on lower margin which joins the pale color on the much reduced genae and gula. Rostrum: length 2.6 mm., extending upon fifth ventral, pale vellowish, apex brownish black. Antennae: segment I, length 1.11 mm., only slightly greater than width of head, black, pale on ventral side, the black broken by several moderate white spots, a white seta arising from each spot; II, 2.8 mm., black, narrowly pale at base; III, 1.45 mm., black, narrowly pale at base; IV, 1.09 mm., black. Pronotum: length .83 mm., width at base 1.51 mm.; fuscous to black, paler on calli and central area of disk, lower margin of propleura pale. Scutellum pale, with a pair of well defined brownish black, subapical, marginal spots. Sternum pale, sides and pleura blackish.

Dorsum darker than in *minutulus*, hemelytra rather uniformly fuscous, with pale spots on embolium, and somewhat paler on middle of corium. Clothed with fuscous, simple pubescence and intermixed with white sericeous pubescence which occurs in numerous spots. Membrane pale, speckled with numerous small brownish to fuscous spots, the preapical area and margins of areoles more evenly fuscous; veins fuscous, white around apices of areoles. Legs blackish and marked with white spots much as *eximius*, spots more or less confluent, forming a well defined preapical white annulus. Genital claspers distinctive, left clasper with inner arm much flattened, broader than in *fumatus* Reut.; right clasper shaped much as in *quercicola* Kngt.

Q. Length 5.3 mm., width 2 mm. Head: width .95 mm., vertex .34 mm. Antennae: segment I, length 1.18 mm.; II, 2.6 mm.; III, 1.37 mm.; IV, .98 mm. Pronotum: length .84 mm., width at base 1.52 mm. Very similar to the male in pubescence and coloration.

Holotype: & June 14, 1912, Plummers Island, Maryland (H. Barber); U. S. N. M. collection. Allotype: Q June 30, 1926, Washington, D. C. (H. H. Knight); author's collection. Paratypes: MARYLAND—& June 18, Great Falls (H. S. Barber). & June 23, 1913, Jacksons Island (Shannon & Barber). Q Aug. 3, 1915, Plummers Island (R. C. Shannon), at light.

#### Phytocoris difficilis, n. sp.

Allied to conspurcatus Kngt., but larger; distinguished by the dark femora with small pale spots only; propleura without pale mark across dorsal margin of coxal cleft.

Q. Length 5.6 mm., width 2.34 mm. Head: width 1.06 mm., vertex

.42 mm. Rostrum: length 2.8 mm., reaching to base of ovipositor. Antennae: segment I, length 1.36 mm.; II, 2.54 mm.; III, 1.51 mm., black, with pale band only at base; IV, 1 mm.; marked with pale as in conspurcatus except segment III. Pronotum: length 1 mm., width at base 1.76 mm.; propleura black, with lower margin only yellowish.

Pubescence nearly as in *conspurcatus*, but with fewer white scale-like hairs and more of the black. Coloration suggestive of *conspurcatus* but hemelytra with less fuscous, the hypodermis distinctly yellowish; the oblique fuscous mark on apical area of corium very distinct on the pale yellowish background. Femora black, although more or less pale at base, the dark color speckled with small yellowish spots which do not coalesce

to form bands; suggestive of spicatus Kngt. in this respect.

Holotype: Q July 3, 1926, Beltsville, Maryland (H. H. Knight); author's collection. Paratypes: Q July 19, Q Sept. 15, Lakehurst, New Jersey (Wm. T. Davis). The type was collected on an isolated tree of Pinus virginiana, and with the Lakehurst specimens coming from a pine area, a host relationship is strongly suggested. The New Jersey specimens have been set aside for some time as an unnamed species, awaiting more material or the male sex for description. With the collecting of a perfectly preserved female the description of the species seems justified.